

## **ABSTRACT**

5 Compositions and methods for plasticizing polyvinyl chloride polymers  
where the plasticizers contain fatty acids derived from vegetable oils and  
the fatty acids are substantially fully esterified with an alcohol (monool or  
polyol), the fatty acids having unsaturated bonds that are substantially  
fully epoxidized, and wherein the fatty acids are added substantially  
randomly to one or more hydroxyl sites on the alcohol. The plasticizers  
10 may be added in amounts between about 10 to 230 pph of PVC resin.

RECORDED IN U.S. PATENT OFFICE